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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,213	02/24/2004	Willy Poppe	POPP3001/JEK	8412
23364	7590	10/10/2007	EXAMINER	
BACON & THOMAS, PLLC			AFTERGUT, JEFF H	
625 SLATERS LANE			ART UNIT	PAPER NUMBER
FOURTH FLOOR			1791	
ALEXANDRIA, VA 22314			MAIL DATE	DELIVERY MODE
			10/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/784,213

Applicant(s)

POPPE, WILLY

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3, 5-7, 9-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT WO 03/003878 in view of Lockwood et al for the same reasons as expressed in paragraph 2 of the Office action dated 2-26-07.
3. Claims 4, 8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth above in paragraph 2 further taken with E.P. 793,932 for the same reasons as expressed in paragraph 3 of the Office action dated 2-26-07.

***Response to Arguments***

4. Applicant's arguments filed 8-27-07 have been fully considered but they are not persuasive.

The applicant argues that the reference to Lockwood taught away from the claimed invention, and thus a prima facie case has not been established. The applicant's argument in this regard is respectfully traversed. The applicant is advised that the reference to Lockwood when read as a whole taught that those skilled in the art of making a viscoelastic foam from polyurethane would have known at the time the invention was made to employ a step of mechanically working the foam material in order to open up the cells of the same and render the polyurethane material as suitable for its intended purpose as a viscoelastic material. The reference to PCT '878 clearly expressed that those skilled in the art at the time the invention was made would have incorporated polyurethane foam in the mattress filling elements. The reference did not

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specify the use of viscoelastic polyurethane foams, however the use of a viscoelastic polyurethane foam would have been understood to have been desirable in the art at the time the invention was made as such viscoelastic polymer foams were desirable for mattress assemblies as taught by Lockwood, see column 1, lines 25-40. Lockwood expressed that it was known to form a viscoelastic foam from a phased mixed combination where the foam has a relatively incomplete or non-existent phase separation. The most common way to achieve the viscoelastic foam material was to interfere with the phase separation of the polymer segments in some way, see column 2, lines 59-62. One viewing Lockwood et al would have understood that this would have been a suitable technique for forming the viscoelastic material of PCT '878. The reference to Lockwood et al suggested that a suitable technique for achieving the phased mixed polymer was the use of a mixture of soft segment precursors (polyols) comprising low, medium and high equivalent weight components which the reference to Lockwood et al suggested might interfere with the formation of an open celled structure in the finished assembly (column 2, line 63-column 3, line 4, column 3, lines 28-35). In order to allow for the opening of the cell structure, the prior art recognized in accordance with the disclosure of Lockwood that one skilled in the art would have post processed the foam in order to open the cells by crushing the foam material mechanically. The applicant is advised that while the reference to Lockwood et al suggested that it was desirable to a viscoelastic foam material which had an open cell structure in order to avoid shrinkage of the foamed material. The reference suggested that this was achieved in the prior art by crushing the foam after manufacture in order to

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ensure an open cell structure. The reference did envision the formulation of a specific polyurethane viscoelastic foam material which "generally" did not require post processing to crush the foam to form the open cell, but this was only for the specific polyurethane formed and the reference to Lockwood et al clearly suggested that for conventional viscoelastic polyurethane foams one would have crushed the same in order to ensure an open cell structure with reduced shrinkage, see column 21, lines 49-54. Clearly, even the foams of the invention of Lockwood et al would have been understood at times to have desirably included a post processing step to ensure that the cells of the foam were indeed open. Even if one were to take from the reading of Lockwood that it was less desirable to perform post processing on the specific viscoelastic polyurethane foam recited therein, the reference made it clear that post processing via crushing a viscoelastic polyurethane foam to render it open celled was conventionally performed in the art. As PCT '878 employed conventional viscoelastic polyurethane foams (and the use of viscoelastic foams for mattress application was clearly desired as suggested by Lockwood et al), one skilled in the art would have been expected and/or understood the value of including a post foam processing step which included crushing the foam in order to render the same open celled and reduce shrinkage of the foam product in light of the teachings of Lockwood et al. Applicant is advised that one skilled in the art would have been capable of selection of suitable viscoelastic polyurethanes from those conventionally and commercially available and that the reference to Lockwood et al appears to suggest that it was generally commonplace to employ a post processing step upon the same in order to open the

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cells in the foam and reduce foam shrinkage therein. Applicant's arguments that Lockwood et al teaches away from such post processing have not been found to be persuasive.

Regarding the rejection of claims 4, 8, and 12, the applicant argues that Pope '878 and Pope '932 are incompatible with one another because Pope '878 expressly suggested that the tubular bodies were glued together along their entire length in order to form the block as disclosed with reference to Figure 6 while the use of the shaped tubes of Pope '932 would not have been capable of being glued together along their length in accordance with the teachings of Pope '878. There is no requirement as claimed for the tubular members to be assembled and cut from a block. One viewing Pope '878 would have understood that a suitable manner for forming a filling element from plural tubes would have included formation of the block as depicted, however the invention was not so limited and included the formation of a foam element as depicted in Figure 4 therein. The reference to Pope '932 suggested that the formation of a tubular element having the shape as depicted therein in the manufacture of a pillow element as the specified shape would have allowed for a softer springy element to have been provided. While Pope '878 provided a means to mass produces the individual elements into a larger block component from which one was able to manufacture the foam component, the reference does not require that this be performed to make the foam elements individually. Additionally, the reference to Pope '932 suggested the desired shape for a pillow to render the assembly softer than the conventional shapes. The claims do not require formation of a block as suggested by Pope '878 and thus there is

no requirement of the same be found in the prior art. One skilled in the art would have understood to utilize the specified shapes of Pope '932 in the prior art processing for the advantages defined therein.

No claims are allowed.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jeff H. Aftergut  
Primary Examiner  
Art Unit 1791

JHA  
October 1, 2007